

WHAT IS CLAIMED IS:

1. cDNA represented as a nucleotide sequence of SEQ ID NO: 2, which codes for Saxatilin, a protein derived from venom of *Agkistrodon saxatilis emelianov*.

2. Saxatilin represented as an amino acid sequence of SEQ ID NO: 1 which is derived from the cDNA of claim 1.

3. A process for preparing Saxatilin which comprises the steps of:

(i) gel filtration of venom collected from *Agkistrodon saxatilis emelianov* to obtain active fraction; and,

(ii) applying the active fraction to high performance liquid chromatography to purify Saxatilin.

4. An expression vector pPSAX containing the cDNA of claim 1.

5. A biologically pure culture of *Pichia pastoris* Y/pPSAX(KCCM-10201) which is obtained by transforming the expression vector pPSAX of claim 4 into *Pichia pastoris* GS115.

6. A process for preparing recombinant Saxatilin which comprises a step of culturing a microorganism transformed with an expression vector containing cDNA of claim 1 to obtain recombinant Saxatilin.

7. The process for preparing recombinant Saxatilin of claim 6, wherein the expression vector is pPSAX.

8. The process for preparing recombinant Saxatilin of claim 6, wherein the transformed microorganism is *Pichia pastoris* Y/pPSAX(KCCM-10201).

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9. The process for preparing recombinant Saxatilin of claim 8, wherein the transformed microorganism is cultured under a condition of pH 5.5 to 6.5, 25 to 35°C for 12 to 24 hours, harvested by centrifugation and cultured again on a medium containing 0.5 to 1.5%(v/v) methanol under a condition of pH 5.5 to 6.5, 25 to 35°C for 72 to 120 hours.

10 10. The process for preparing recombinant Saxatilin of claim 8, wherein the culture containing transformed microorganism is subjected to a hydrophobic column and high performance liquid chromatography to purify Saxatilin.

15 11. Anti-platelet agent comprising an active ingredient of Saxatilin and pharmaceutically acceptable carrier.

12. Anti-tumor agent comprising an active ingredient of Saxatilin and pharmaceutically acceptable carrier.

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